

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

6/B
P. Walker
2-3-03

Applicant(s): Mahajani et al.	Group Art Unit: 2814
Application No.: 10/079472	Examiner: Thao X Le
Filed: February 19, 2002	
Title: Gate Dielectric Structures for Integrated Circuits and Methods for Making and Using Such Gate Dielectric Structures	FAX RECEIVED JAN 22 2003 TECHNOLOGY CENTER 2800
Attorney Docket No.: 40025.005, (MA-068)	

Assistant Commissioner for Patents
Washington, D.C. 20231

AMENDMENT AND RESPONSEStatus of Claims:

Claims 1-26 have been rejected under 35 USC 103.

AMENDMENT

Please enter the following amendment and remarks in response to the Office

Action of October 22, 2002.

IN THE SPECIFICATION

Please amend paragraph [37], on page 11, as follows. Appendix A contains a marked-up version of this paragraph showing the changes being made.

[37] The gate oxide of the TFT device is made in the invention using substantially the same ISSG process described above (i.e., that described for SONOS

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B1
Cont'd

B1
end

devices) except that for TFT devices, the oxide is grown over polysilicon. Thus, the growth rates will be more than the growth rates described above for SONOS devices. Accordingly, lower process temperatures and/or shorter times will be required for TFT devices to obtain a similar oxide thickness as SONOS devices. In one aspect of the invention, the temperature for the ISSG process used to make the gate dielectric for TFT devices can range from about 600 to about 900 degrees Celsius, preferably about 700 to about 850 degrees Celsius, and more preferably about 800 degrees Celsius.

IN THE CLAIMS

Please cancel claims 2, 4, 10, 11, and 16-19 without prejudice. Please amend claims 1, 3, 5, 8-9, and 20-26 as follows. Please add new claims 27-34. All pending claims are provided in clean form, beginning on the next page. Appendix B contains a marked-up version of these claims showing the changes made.

PTO/SB/17 (01-03)

Approved for use through 04/30/2003. OMB 0651-0032

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

☐ Applicant Claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$144.00)

Complete if Known

Application Number	10/079472	FAX RECEIVED
Filing Date	2/19/2002	
First Named Inventor	Mahajani, et al.	JAN 22 2003
Examiner Name	Thao X. Le	
Art Unit	2814	TECHNOLOGY CENTER 2800
Attorney Docket No.	MA-068	

METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None
☒ Deposit Account
 Deposit Account Number
 Deposit Account Name

502302

Matrix Semiconductor

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) during the pendency of this application☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
1001	750	2001	375	Utility filing fee	
1002	330	2002	165	Design filing fee	
1003	520	2003	260	Plant filing fee	
1004	750	2004	375	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) (\$0)

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	20** = 8 X	18.00	144.00
Multiple Dependent	3** = X		

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	84	2201	42	Independent claims in excess of 3
1203	280	2203	140	Multiple dependent claim, if not paid
1204	84	2204	42	**Reissue independent claims over original patent
1205	18	2205	9	**Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$144.00)

** or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	410	2252	205	Extension for reply within second month	
1253	930	2253	465	Extension for reply within third month	
1254	1,450	2254	725	Extension for reply within fourth month	
1255	1,970	2255	985	Extension for reply within fifth month	
1401	320	2401	160	Notice of Appeal	
1402	320	2402	160	Filing a brief in support of an appeal	
1403	280	2403	140	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	65	Petition to revive - unavoidable	
1453	1,300	2453	650	Petition to revive - unintentional	
1501	1,300	2501	650	Utility issue fee (or reissue)	
1502	470	2502	235	Design issue fee	
1503	630	2503	315	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	750	2809	375	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	750	2810	375	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	750	2801	375	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$0)

SUBMITTED BY

Complete (if applicable)

Name (Print/Type)	Pamela A. Squires	Registration No. (Attorney/Agent)	52246	Telephone	408-869-2921
Signature		Date	1/22/03		

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 37 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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Matrix Memory

Matrix Semiconductor, Inc.
3230 Scott Boulevard Santa Clara, California 95054
Telephone 408.969.4848 Facsimile 408.969.4849

January 22, 2003

Time: _____
(Santa Clara, California)

TO: Commissioner for Patents
Attn: Thao X. Le
Patent Examining Corps
Facsimile Center
Washington, D.C. 20231

FROM: Pamela J. Squyres

OUR REF: MA-068

TELEPHONE: 408-869-2921 **FAX RECEIVED**

FAX NUMBER 703-308-7722

JAN 22 2003

* Please deliver to Examiner Thao X. Le in Art Unit 2814. *

TECHNOLOGY CENTER 2800

Document(s) Transmitted: **Fax Cover Sheet (1 pg)**
Power of Attorney (1pg)
Statement Under 37 CFR 3.73(b) (1pg)
Fee Transmittal in duplicate (2 pgs)
Amendment and Response to Office Action of 10/22/02 (23 pgs)

Total pages of this transmission, including cover letter: 28 pgs.

If you do NOT receive all of the pages described above, please telephone us at 408-869-2921, or fax us at 408-869-8923.

In re. Patent Application of: Maitreyee Mahajani et al.

Examiner: Thao X. Le

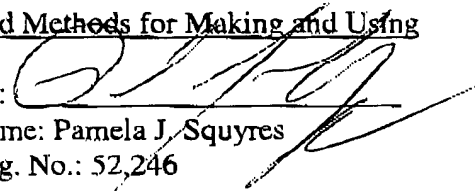
Serial No.: 10/079472

Group Art Unit: 2814

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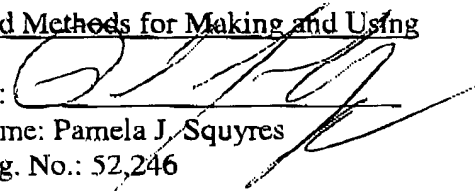
Docket No.: MA-068

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By: 
Name: Pamela J. Squyres
Reg. No.: 52,246

I hereby certify that this paper is being transmitted by facsimile to the U.S. Patent and Trademark Office on the date shown below.


Pamela J. Squyres


Date of Transmission
1/22/03